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# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

PUBLICATION NUMBER : 09213648  
PUBLICATION DATE : 15-08-97

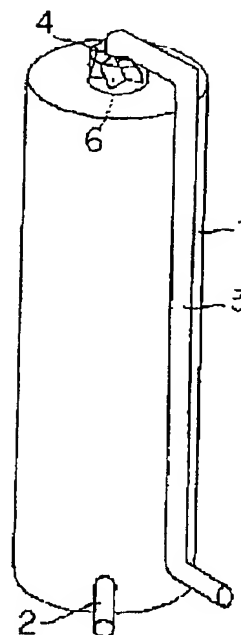
APPLICATION DATE : 31-01-96  
APPLICATION NUMBER : 08016121

APPLICANT : SANYO ELECTRIC CO LTD;

INVENTOR : KOMORI KAZUHIKO;

INT.CL. : H01L 21/22 C23C 16/44 H01L 21/205  
H01L 21/31 H01L 21/324

TITLE : SEMICONDUCTOR TREATMENT  
APPARATUS



ABSTRACT : PROBLEM TO BE SOLVED: To provide a semiconductor treatment apparatus for uniform heat treatment on a semiconductor substrate.

SOLUTION: For heat treatment of semiconductor substrates in a reaction tube 1, the reaction tube is heated by a heater. Gas is introduced through a gas introducing pipe 3 into a straightening mechanism 4, diverted by straightening plates and directed according to the slope of each straightening plate. The gas introduced into the reaction tube 1 from the straightening mechanism is diverted into four. Each divided flow goes in a spiral in the reaction tube 1. Since the gas flowing in a spiral fills the whole reaction tube 1 and mixes the inside of the reaction tube 1, it makes the temperature distribution uniform in the reaction tube 1 by eliminating partially low or high temperature area in the reaction tube 1. Accordingly, a multitude of semiconductor substrates can be subjected to a uniform heat treatment.

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